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The Children's Museum

of

The Brooklyn Institute of Arts and Sciences

Brooklyn, 1900-1901

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The Brooklyn Institute of Arts and Sciences

THE CHILDREN'S MUSEUM

BROOKLYN, September 25, 1900.

To the Teachers of Brooklyn:

In this informal manner it is desired to call your personal attention to the natural history and other collections at the Children's Museum, 185 Brooklyn avenue. There are on exhibition here and accessible to you and to your pupils a large variety of objects which have been selected to aid in the presentation of nature work in the elementary schools. These collections are being increased, both in number and variety, and they will continue to grow so long as they prove useful to you or possess educational value. A large number of the subjects taught in the public and private schools of Brooklyn are susceptible of objective illustration. The Children's Museum contains a vast amount of illustrative material.

You are invited to make the fullest possible use of our collections. Should you desire to bring your classes here, for observation or for private study and recitation, you may be accommodated for this purpose, in the lecture room, seating forty persons; and such collections as you may desire to study closely will be furnished you by the attendants. It is required only that you give two days' notice of an intended visit with a school or class.

We shall be glad to make especial effort to illustrate for you any particular nature subject, or to furnish facilities for class-work in nature study.

Connected with the Museum is a growing natural history library, now numbering more than one thousand volumes, to the free use of which you and your pupils are invited. A trained librarian, Miss MIRIAM S. DRAPER, is in constant attendance to aid teachers or students in securing the use of the books which the library contains.

Teachers specially interested in nature study will be most cordially welcomed by the Curator at any time, and suggestions with regard to additional facilities for nature study will be gladly received.

Should you wish more complete information a postal card or, better still, a personal visit will place in your hands a "Prospectus" in which the nature of our collections and our plans are more fully outlined.

Very respectfully,

R. ELLSWORTH CALL,
Curator.

The Brooklyn Institute of Arts & Sciences

The Children's Museum

Brooklyn Avenue and Prospect Place

BROOKLYN-NEW YORK

To Our Young Friends:

This Museum has been founded as a permanent study place in Natural History for the boys and girls of Brooklyn. You will find here large and growing collections of natural history objects. They are arranged and named in such a manner that you can fully understand them. The management wishes you to use these collections to your own profit and pleasure, at all times. You will be welcomed at the Museum on any day between 9.00 A. M. and 6.00 P. M., and you will always find some one present to assist you in understanding the various objects shown.

Boys and girls, like yourselves, often find odd and curious animals, or plants, or minerals, about which they would love to learn something. Come to the Museum and bring them with you; someone will be found here who can tell you about them.

In your school work and in your home reading you may often find the names of animals or plants of which you can learn very little or nothing at

home. Bring your questions about such things to the Museum and it is possible you can be helped.

If you have young friends, show them this letter or tell them its nature. Invite them to visit the Museum with you. Bring your parents or friends to see what we have to show you that is helpful in understanding the great world out-of-doors.

When you visit the Museum do not fail to ask the attendants to show or to explain to you any objects that may attract you. The attendants are here for that purpose: they are glad to have you ask questions.

You will also find here a fine collection of books about birds, shells, plants, insects, reptiles, people, geography, products of other lands, and similar subjects. These are free to you to use in the Museum reading room or in connection with our specimens. Many of these books you will not easily find elsewhere. You are welcome to use them and to enjoy them.

If you find any puzzling names of races of men or of places in your geography you may be helped by this library, and the librarian, Miss Draper, will be glad to assist you in any way.

We wish you to visit the Museum often and to bring others with you. The objects on view are frequently changed, and we will always have something new.

R. ELLSWORTH CALL,
Curator of the Children's Museum.

The Children's Museum

OF

The Brooklyn Institute of Arts and Sciences

BEDFORD PARK

Brooklyn Avenue, Park and Prospect Places

OPENED DECEMBER 16th, 1899

Brooklyn, N. Y., 1900

THE CHILDREN'S MUSEUM, BEDFORD PARK, BROOKLYN AVENUE.

THE CENTRAL MUSEUM OF THE BROOKLYN INSTITUTE OF ARTS AND SCIENCES.

BEING ERECTED IN INSTITUTE PARK, FACING THE EASTERN PARKWAY.

OFFICERS AND COMMITTEES

HAVING SPECIAL RELATIONS TO THE WORK OF THE

CHILDREN'S MUSEUM.

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THE CHILDREN'S MUSEUM.

In the Spring of 1899 the Brooklyn Institute of Arts and Sciences, represented by its Board of Trustees and Council, determined to establish as an integral part of its work, and as a separate and distinctive feature, a CHILDREN'S MUSEUM.

The Institute has been engaged for several years through its several Departments and Sections in making museum collections and libraries, and in giving instruction by lectures and courses of study in many subjects. Moreover, the Institute has established under the auspices of its Department of Pedagogy, a Pedagogical Museum and Library of a very comprehensive character. Such a Pedagogical Museum and Library will in time represent the history of education from the earliest times, and will illustrate the equipment of schools and colleges in the work of giving instruction. A Pedagogical Museum and Library naturally interests the student of the history of education, and is especially valuable to teachers in public and private schools. It would include the equipment used in teaching the various branches of learning which deal with the Arts and Sciences represented by the several Departments of the Institute. Similar Pedagogical Museums and Libraries have been created recently in connection with other educational institutions, notably at the Teachers' College of Columbia University and the School of Pedagogy of New York University.

The establishment of a Museum that will be of especial value and interest to *young people between the ages of six and twenty years* has not, however, been attempted heretofore on any extensive or carefully devised plan. In Brooklyn there are approximately three hundred thousand children

of the school age; of these nearly one hundred and fifty thousand are in the public schools, sixty thousand in private schools, and ninety thousand who are receiving no school instruction. This is an enormous public; a most important one to be reached by a large public benefaction like the Institute, charged as it is with the duty of providing public Museums for the instruction and enjoyment of all the people.

The General Plan of the Children's Museum.

It is the purpose of the Children's Museum to build up gradually for the children of Brooklyn and Queens a Museum that will delight and instruct the children who visit it; to bring together collections in every branch of local Natural History that is calculated to interest children and to stimulate their powers of observation and reflection; to illustrate by collections of pictures, cartoons, charts, models, maps, and so on, each of the important branches of knowledge which is taught in the elementary schools. The Museum through its collections, library, curator and assistants will attempt to bring the child, whether attending school or not, into direct relation with the most important subjects that appeal to the interest of children in their daily life, in their school work, in their reading, in their games, in their rambles in the fields, and in the industries that are being carried on about them or in which they themselves later may become engaged.

Branches of Industry.

All the chief branches of human industry are susceptible of illustration for children, and collections illustrating those of primary importance are now being installed in the Museum. To take the case of the iron industry as elucidating this phase of the Museum's work:

The collection devoted to the iron industry includes, first,

samples of the chief iron ores, with their common and mineralogical names; second, examples of the materials employed in reducing the metallic iron from these ores, including specimens of crushed ore; third, various objects made from the iron which will, incidentally, illustrate the kinds of iron, as cast-iron, malleable iron, steel, and the other trade names for the varieties of the metallic product. With this collection a teacher or student may be able to trace the whole sequence of events in this great industry, since each step in the process is illustrated or explained in full. As in the case of the iron industry so the chief industries of our city and our land will eventually find illustration both in the raw materials and the processes of manufacture, and in the completed products.

Growing directly out of the named locality of specimens in a museum is the geographical distribution of natural products and of industries. This belongs to the Departments of Geography and History, which are merged together in the Children's Museum's plan.

In a few words the plan of this part of the Children's Museum may be said to include the great round of human endeavor and of human interests so far as they appeal to the child, or so far as they may be made to subserve the cause of the education of youth. But a distinctive feature carried all through each collection is the idea of typical industries. Each collection is a unit within itself and should carry a lesson of its own quite apart from any other objects which may be seen in the Museum at the same visit. All the industries that are prosecuted by man will not be exhibited, for that would destroy the very object which it is sought to accomplish. Selected collections either are now on exhibition or will be obtained. It is in this respect that the character of the Children's Museum will differ from that of all others. Its collections are selective and have a real, definite relation to the home and school life of the child.

Collections Illustrating Botany.

There are now on exhibition a large number of charts and cartoons for the teaching of botany. These are supplemented by large dissectible models of typical flowers, some of which dissect to the minutest detail. Of the charts and cartoons those of Henslow and of Johnston are the best known. But additional to these are a large number of charts, by other authors, which deal with almost every branch of botanical science from the lower cryptogamia up through the flowering plants. Still others illustrate microscopical botany, both those branches which include very minute forms of lowly plants and those which deal with histological subjects. The plant models, which are very large, include illustrations of the principal great groups of plants like the rose family, the poppy family, etc.; and also the germination of both dicotyledonous and monocotyledonous forms; the first is illustrated by the bean, the second by the wheat plant. There are also very large models of leaves, stems and roots which may be used in explaining to classes the processes of growth in plants. All of these models are accurate, except in the single item of size.

Many of the botanical charts have a particular educational value because they exhibit plants in all their details, life-size or much larger, and show them from root to branch, with details of flower structure, seed, embryo and other important botanical features.

Two large series of charts from Germany and England deal with the trees of most common occurrence in the forests or in the arts. The general habit of the tree is shown, together with details of its structure, which include both longitudinal and cross-sections of the woody stems, especially such as are employed in the fabrications of dwellings. These are colored to represent the real object and are useful adjuncts to school-room work.

In connection with these charts and models there will be as complete an exhibition of the woods and trees native to Long Island as it is possible to secure. The plants of Long Island form a special subject of display, and are shown in related groups. To illustrate this feature of the Museum's work it may be said that the plants which flower most abundantly, or which are characteristic of the seasons, will be shown at their appropriate seasonal periods. This will serve teachers and students of botany particularly, since each exhibit, while on view, will be an epitome of the plant-life that may be found in bloom or in fruit at each particular season in and around Brooklyn.

In connection with the above botanical exhibits mention may be made of the very large series of Deyrolle cartoons illustrating those plants of France which are used in the arts. On these there are shown specimens of the leaf, fruit and wood, or illustrations of them.

A collection that will be of especial value is one which exhibits the larger fungi of the island such as the toad-stools, mushrooms and puff-balls. These are separated into those species which are edible and those which are poisonous, and are further made valuable by colored plates of a number of the more interesting species. The natural forms are preserved in formalin and retain their life coloration.

Among the more important accessions to these collections, by purchase, are the following:

Engleder's Pflanzenkunde, 60 pls.
Illustrations of Botany, Johnston, 6 plates.
Plants of Commerce, Johnston, 16 plates.
Illustrations of Trees, 6 plates.
Illustrated Method of Botany, 9 sheets, Henslow.
Deyrolle's Botanical Models, 46 in number.
Musée Industriel Scolaire, 142 tableaux.
Johnston's Natural History Plates, 79 in number.

Collections Illustrating Zoölogy.

These collections are of several classes. The most attractive exhibits at present are the large models of typical animals, some of which are dissectible. The beetle, the honey-bee, the silkworm and the snail are all dissectible models and exhibit to very small details their structure. To enable this to be done with accuracy the models are made very large and are schematically colored. The snail model, for instance, is more than three feet in length, and dissects into a sufficient number of parts to reveal the entire internal anatomy of the type of animals to which it belongs.

A second group of zoölogical materials is a collection of alcoholic dissected forms, one from each of the great groups of animals, and each dissected form is made further useful by "staining" to differentiate the circulatory, nervous and digestive systems. These are mainly of American forms of life.

A third group of zoölogical specimens is now being made. It will be largely local, and will include representative specimens of all the fishes, the reptiles, the mollusks, the insects, the mammals, and the birds of Long Island. At present a beginning has been made in the mollusca, the fishes and the insects. The collections of fishes now being made include all the food fishes of Long Island commonly or rarely found in the markets, and are the gift of the Hon. Eugene G. Blackford. The collections of insects exhibit the life history of a number of Brooklyn lepidoptera, or butterflies, including food plants, caterpillars, cocoons, chrysalides, parasites, and in many cases the eggs. These collections will receive constant accessions until they are as complete as it is practicable to make them. A large number of specimens illustrating the life history of insects have been prepared by Mr. Jacob Doll, Curator of Entomology.

A fourth group of objects in this branch of the Museum's

work will exhibit the life histories of the several large groups of animals by means of carefully prepared objects, mainly alcoholic. That of the batrachia, represented by the frog, and of the hymenoptera, represented by the honey-bee, and of the coleoptera, represented by the large Dytiscus, are already complete.

A great many useful and instructive objects have been donated this department of the Museum. A list of the more important of these may be found on pp. 340-347.

By purchase the following have been added recently to the collections:

(1) Two cases illustrating insect metamorphosis.

(2) One case showing The Life History of the Honey Bee.

(3) Twenty-nine large dissectible models of typical animal forms, including snail, beetle, cuttle-fish, cray-fish, star-fish, silkworm, bryozan, and others.

(4) Five dissections illustrative of the nervous and circulatory systems of the higher vertebrates.

(5) Fifty-six models of the types of mammals and other large animals, including most of the domestic forms.

Collections Illustrating Geology.

Rocks and soils are objects with which the boys and girls come into daily contact in our streets and yards. The walks, the buildings, the streets, as well as the flower-gardens have each their assortment of useful and instructive geologic objects. To get these together, to enable them to be fully understood, to show the relation which they sustain to life and to industry, is the object of the geological collections. Long Island has little country rock in place within its limits. But it is a vast storehouse of minerals and rocks brought here in the glacial period. These are well illustrated in the Museum's collections. The granites, the syenites, the trap-

rock, the sand-stones, the clays, together with their constituents and their appearance, may all be easily learned with the aid of a well arranged collection. The exhibit illustrates the various kinds of rocks, as sedimentary, metamorphic, stratified, unstratified, and other facts which the student of descriptive geology will wish to know and which the teacher must know.

From rocks to the minerals which compose them is an easy step. There are now on exhibition many of the common rock-forming minerals which are designed to show, first, the physical and optical characters of the minerals; second, their crystalline forms, and third, their beauty. A collection of useful ores, one of building stones and of stones used in the arts, or for ornamental purposes, and of specimens showing weathering, completes this exhibit, and presents this phase of geologic study as fully as it can profitably be pursued in secondary schools.

The accessions to this section of the Museum have not been important; chief among them, however, are the following:

By Purchase.

From Frederick Braun:

Seventy specimens of drift rocks from the Borough of Brooklyn. These have been newly labeled in general accordance with the plan of label adapted to purposes of instruction.

By Gift.

From Henry McManus:

Specimens of gold, silver and antimony ores from Nevada.

From R. Ellsworth Call:

Eight (8) specimens fibrous gypsum and four (4) stalactites from Mammoth Cave. Specimens of garnet, quartz, hornblende and other common minerals to illustrate crystal forms.

Collections Illustrating Meteorology.

There are, at the present time, installed and steadily used in recording meteorologic phenomena, all the chief instruments employed in government meteorologic work. These comprise the following apparatus: Barograph, thermographs of two forms—Draper's and Richard's—solar radiation thermometers, psychrometers, wind electrical registration apparatus, the Robinson anemometer, aneroid barometers, charts, maps, and rain-gauges.

There will also be installed during the coming year electrical rain and snow recording apparatus, electrical sunshine recorder, and additional pyschrometers. These instruments serve the triple purpose of (1) exhibiting the methods employed in weather study and prognostication; (2) of being themselves an illustration of delicate physical apparatus, and (3) of furnishing illustrations for courses of lectures on meteorological subjects for teachers. An entire room is given to this sort of apparatus, all of it in active use. Samples of the charts used with the apparatus are shown as well as the complete series of publications which are based on the work of these instruments. Since each instrument has a special explanatory label stating the kind of work which it is doing, the collection is very useful to teachers and to visiting classes.

A number of the latest works which treat of meteorology and allied subjects are in the library connected with the Museum. Among them are "Modern Meteorology," Waldo; "Elementary Meteorology," Scott; "Tornadoes," Finley; "Weather," Abercromby; "Meteorology," Russell; "Elementary Meteorology," Davis; and "Treatise on Winds," Ferrel. In addition, all the meteorological literature published by the United States Weather Bureau, from all the States and from the Washington office, is regularly received.

During the months of April, May and June a course of eight lectures in elementary meteorology was given by the Curator to two large classes of public and private school teachers. The limited capacity of the lecture room rendered necessary the division of the class into two sections. In all seventy-nine teachers registered for the course of eight lectures, the dates and subjects of which were as follows:

Apr. 20.—"The Elementary Principles of Physics involved in Meteorology."

Apr. 27.—"The Atmosphere and its Circulation."

May 24.—"Atmospheric Temperatures, their Measurement and Distribution."

May 11.—"The Barometer, its Theory and its Use."

May 18.—"The Moisture of the Atmosphere."

May 25.—"The Causes and Distribution of Rainfall."

June 1.—"Weather and Climate."

June 8.—"Optical and Electrical Phenomena of the Atmosphere."

The attendance upon these lectures was very gratifying indeed, and illustrates a valuable line of educational work by the Museum.

Collections Illustrating Human Anatomy.

These are representative so far as installed. Very large dissectible models of the eye and the ear, large models of the nose, the hand, of sections of the skin, the brain, and the tongue are among the objects now shown. A manikin dissectible for all the larger organs of the body is also installed. A very large model of the human heart, with its valves, muscles, chambers, nerves, etc., make the matter of the systemic circulation of the blood readily comprehensible by even a child. This apparatus will be supplemented in time with additional models and be made as complete as practicable. These models, as are all of the Museum's exhibits,

are open to the use of teachers with classes from any school in Brooklyn or Queens.

A very large number of anatomical charts, by various authors, and many excellent specimens of anatomical chart making, form a considerable part of the present installation for the study of human anatomy. Many of the zoölogical charts, especially those which deal with the mammalia, have osteological and other details which enable the series to be used in general work on comparative anatomy.

It is planned to enlarge these collections by the addition of models and charts of the nervous system and with anatomical preparations that will altogether form a very complete exhibition of the general anatomical features of the human body.

A considerable number of microscopic preparations illustrative of normal human anatomy were purchased during the year. These have been, from time to time, placed on exhibition in connection with the permanent microscopical exhibit. They have proven very useful adjuncts to the teaching power of the general collections.

During the months of February, March and April a course of ten lectures by the Curator, on the "General Anatomy and Physiology of the Human Nervous System," was given. This course was well illustrated by lantern photographs, charts, models and microscopic preparations. The dates and subjects of the lectures were as follows:

Feb. 28.—"A General Account of the Structure of Nervous Matter."

Mar. 7.—"A General Classification of Nervous Organs."

Mar. 14.—"The General Anatomy of the Brain."

Mar. 21.—"The Minute Anatomy of the Brain and its Physiology."

Mar. 28.—"The First Three Pairs of Cranial Nerves. The Nerves of Sight and Smell."

Apr. 4.—"A General View of the Cranial Nerves and a Special Study of the Sense of Smell. The Medulla Oblongata and its Physiology."

Apr. 11.—"The General Anatomy and Physiology of the Ear."

Apr. 18.—"The General and Special Anatomy of the Eye. How to Observe and Correct Defective Vision in the School Room."

Apr. 25.—"The Nervous System in its Relation to Digestion and Circulation."

May 2.—"The General Relations of the Special Nerves. A General Review of the Nervous System."

This course was taken by a class of thirty-seven (37) teachers from the Brooklyn schools.

Collections Illustrating Geography and History.

These two subjects are so closely related in the Museum Exhibits that each supplements the other. Outside of the field of Physical Geography, which forms a group in itself, these two exhibits are combined in one general collection. This contains a number of colored cartoons which represent important events in history; also a number of charts representing castles, homes, tournaments; historical charts, maps, and plans; models of the chief races of men; a series of wall-plates illustrating the evolution of the steam engine, from that of Savery, 1863; Newcomen and Cawley, 1705; Trevethick, 1802, and Watt's single and double valve engines. This series of charts illustrates the historical development of practical engine-work. Lehmann's Kulturgeschichtliche Bilder gives other historical information of an important character.

There are now in place, in the form of historic charts, a considerable number of carefully executed plates which illustrate the various styles of clothing adapted for different

peoples from 400 B. C. down to the end of the seventeenth century. Associated with these illustrations of dress or habit are the chief forms of armor and the manner in which they were employed. The war dress of many ages is thus exhibited, showing an evolution which is both attractive and instructive. It is quite likely that a boy who is reading the German history of the Middle Ages will here find something to throw light on the obscure places of his text. The plants of commerce, as a related geographical subject, are fully illustrated both by figures of the whole plant and of its parts. Other colored plates show the manner of the cultivation and of the preparation for the markets of important food plants of the world by the native growers. The value of exhibits such as these will at once be apparent to teachers. Moreover, as some of these charts have been gathered from Europe they will serve, as a matter of secondary importance, to illustrate the methods of teaching adopted in other lands.

The collections in this department are in an initiatory condition; accessions by purchase have been as follows:

Historical Celebrities, 6 pls.
Historical Scenes, 6 pls.
Types of Nations, 7 plates.
Pictorial Illustrations of Trades, 20 plates.
Hirt's Historical "Bildertafeln," 2 pts. of text.
Lehmann Kulturgeschichtliche Bilder, I and II.
Lohmeyer's Wandbilder, 20 plates.
History of Steam Engine, 11 sheets.

The Lecture Room.

A room has been set apart for the purpose of utilizing these collections by teachers in the pursuance of their regular school work. This room is seated with forty tablet-arm opera chairs of improved construction, and is provided with a suitable projection apparatus for illustrating lectures. To

this room instructors of any school, public or private, in Brooklyn or Queens may bring classes and use any apparatus or collections in the Museum in the further prosecution of their work. In this room are the collections illustrating elementary physics which possess both a scientific and a pedagogic value. All the necessary apparatus to illustrate the scientific side of the several branches, as mechanics, acoustics, light, electricity, magnetism, etc., may be here seen and used. The pedagogic side finds expression in the adaptation of these selected pieces to teaching purposes rather than to purposes of investigation.

THE CHILDREN'S MUSEUM LIBRARY.

In connection with the exhibition and teaching work of the Museum there has been established a reference library for teachers, students and children, under the charge of a trained and experienced librarian. About nine hundred volumes have been placed on the shelves in an attractively fitted room on the second floor of the Children's Museum Building.

The books have all been very carefully chosen to meet the needs of teachers and students, as well as children; they include books upon Nature Study and Science and the various branches of knowledge which are illustrated in the different collections of the Museum. In science only recent and thoroughly reliable books have been selected, and in each case the latest editions and those most attractive and helpful to students.

A few illustrations from the different departments of the library will serve to show its aim and scope. Naturally, the subjects of Botany and Zoölogy are most fully represented. In botany, may be found books with a simple grouping of the flowers, by color; such as Dana's "How to Know the Wild Flowers," and Blanchan's "Nature's Garden;" also many

books on the structure of plants, such as Bailey's "Lessons with Plants," and Coulter's "Plant Structures and Plant Relations." The advanced student will find treatises by Strasburger, Vines, and others. There are also the most recent and popular books upon our native trees and shrubs, Britton and Brown's "Illustrated Flora of the United States," and many others.

Entomology is a subject of wide interest, and boys who are making collections of butterflies and other insects will find here books which aid them in identifying their specimens. They will also find books which tell them in a simple way just how to make their collections and how to preserve them in the best manner. Among them are Holland's "Butterfly Book," Comstock's "Insect Life," several books upon butterflies by Scudder, also Packard's "Entomology," and "Guide to the Study of Insects." On the shelves may also be found some of the publications of American Entomological Societies.

The subject of birds is also of interest, and is quite fully represented here. Popular books illustrated by colored plates, and with a simple grouping by the color of the birds, are found to be of much practical help to the young student; among such are Blanchan's "Bird Neighbors," and "Birds that Hunt and are Hunted."

The subject of geology and other closely related matters furnish many attractive books for readers. Among others may be mentioned Russell's "Lakes and Rivers of North America," Merrill's "Rock-weathering and Soils," Crosby's "Common Minerals and Rocks," Dana's "Manual of Geology," and Winchell's "Walks and Talks in the Geological Field."

Geography and travel form another important part of the library. In order to give this department a live interest, books have been added treating of the people and countries upon which the interest of the public is centered, such as

South Africa, China, the Philippines, Alaska, Cuba and Hawaii.

The lectures which have been given by the Curator to the teachers of the public schools upon Meteorology and Elementary Physics have made a collection of books upon these subjects a necessary part of library equipment; many of the newer and more important books on this subject are now in the library.

Anatomy and physiology are represented by many books, such as Huxley's, Foster's and Yeo's Text-books of Physiology. The special organs of sense, which are illustrated in the collections of the Museum, and which have been discussed in the lectures by the Curator, are fully treated in such works as Donaldson's "Growth of the Brain," Bernstein's "Senses of Man," and McKendrick's "Physiology of the Senses." There are also several Health primers, such as Harlan's "Eyesight and How to Care For It," Wilson's "Summer and its Dangers," and Blakie's "How to Get Strong and How to Stay So."

Among the periodicals to be found upon the tables are the standard scientific periodicals, such as *Nature, Science,* the *American Naturalist, American Journal of Science, Journal of Applied Microscopy,* etc. There are also periodicals on special subjects, such as the *National Geographical Magazine, Journal of School Geography, Bird-lore, and Plant World.*

Thus, with the aid of current periodicals and recent scientific books will be gradually built up a library which will fill an important place in educational work in Brooklyn and its vicinity. Teachers will find here many valuable aids to their school work, and the co-operation of teachers is earnestly desired in sending to the library all pupils who are desirous of getting information on subjects related to their studies, especially on the lines of Nature Study and Geography.

Among the many practical aids to teachers may be mentioned a collection of books on the subject of education. The history of education and the work of prominent educators are discussed in such books as Williams' "History of Modern Education," and Shoup's "History and Science of Education." The methods to be employed in teaching the different branches of knowledge, such as geography, zoölogy and physiology and how to adapt such instruction to the different grades of pupils, are treated in the manuals by Calkins, Kiddle, Wickersham and others.

The Library is open every week day from 9 A. M. to 6 P. M., and is for reference only. Paper and pencils are provided for all who wish to take notes upon any subjects in which they are interested. The Library is in charge of Miss Miriam S. Draper, a trained librarian of much experience, who will always be glad to give assistance to any one who may call upon her.

Lectures in 1900-1901.

Three or four courses of lectures on Natural History subjects will be given to teachers during the school year. These will cover the following subjects:

A course of twelve lectures on "Common Minerals and Rocks."

A course of ten lectures on "Elementary Meteorology."

A course of thirteen lectures on the "General Physiological Processes of the Human Body."

A course of eighteen lectures on "Nature Study," illustrated by the Museum's collections and by field excursions.

These courses of lectures are designed for teachers and as an aid in their school-room work, and are all free to those actively engaged in teaching.

Attendance.

The attendance record at the Children's Museum, from the date of opening, December 16, 1899, to July 1, 1900, is as follows by months:

December, 1899	809
January, 1900	1,607
February, 1900	1,740
March, 1900	2,584
April, 1900	4,915
May, 1900	8,864
June, 1900	8,116
Total attendance	28,635

The above record of visitation includes the visits of forty-one teachers, with classes, numbering from fifteen to forty members. Nearly all came for a special purpose, connected with their regular school work, and found the collections helpful and instructive. As soon as this feature of the Museum's work is well understood it is believed that hundreds instead of scores will take advantage of the opportunities here presented.

Visiting Days and Hours.

The Museum will be open to the general public every day, as follows: 9.00 A. M. to 6.00 P. M., and 2.00 to 6.00 P. M., Sundays.

How to Reach the Museum.

Fulton street cars to Brooklyn avenue; Nostrand avenue cars to Prospect place; Douglass street cars to Brooklyn avenue; Bergen street cars to Brooklyn avenue; Tompkins avenue cars to Prospect place; Kings County Elevated to Brooklyn avenue.

Donations to the Children's Museum in the Department of Zoölogy.

From Hon. Eugene G. Blackford:

One hundred and four specimens of East Coast of U. S. food fishes; a case illustrating the life-history and enemies of the oyster; specimen of logger-head turtle; specimen of Bermuda lobster.

From Mr. Jacob Doll, Curator of Entomology at the Central Museum:

One living *Heterodon platyrhinus*, or blowing viper.

From Mr. J. S. Yergason:

Whale vertebra, Long Island; skeleton of shark, Indian Ocean; samples of silk and silk cocoons from Italy, China and Japan.

From Mr. John Bender:

Cocoons of Bombyx mori and samples of silk.

From Mr. Francis Matthiez:

Fifteen specimens of the edible snail (*Pomatia pomatia*), living, for vivarium.

From Mr. Laurence Ericson, Assistant in Taxidermy:

Forty-eight specimens of birds' eggs, from Sweden, illustrating eight species.

From Mr. John H. Taylor:

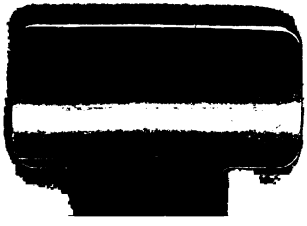
One specimen *Pelamis bicolor*, alcoholic, from the coast of Equador.

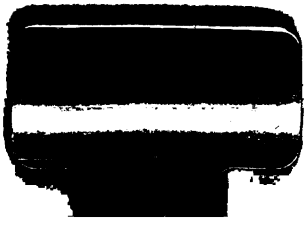
From Mr. W. F. Ward, Jr.:

One large specimen *Limulus polyphemus*.

From R. Ellsworth Call, Ph.D.:

Blind fish, blind insects, and other subterranean forms of life from Mammoth Cave, Kentucky; eighty specimens various genera, land and fresh water mollusca.





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